

1 **Listing of the Claims**

2 **In the Claims:**

3 No amendment has been made to the claims, but they are listed below for the Examiner's
4 convenience.

5 1. (Previously Presented) A method for inserting an image into a document stored in a
6 memory of a computer, comprising the steps of:

7 (a) making an image source device active with an application program used to
8 create a text content of said document, wherein the image source device is in communication with the
9 computer and the computer is executing the application program;

10 (b) using a special application programming interface (API) module accessed from
11 within the application program, for interfacing the application program with a TWAIN module that is
12 used for acquiring an image with the image source device that is active, the special API module
13 providing a user interface that is presented to a user within and under control of the application
14 program, said API module isolating a user from directly interacting with the TWAIN module and
15 thereby simplifying the step of acquiring the image;

16 (c) causing the application program to employ the special API module for
17 negotiating with the image source device that is active to determine a set of image capture parameters
18 that control said image source device when acquiring the image; and

19 (d) communicating data representing said image from the image source device into
20 the memory of the computer so that the data representing said image comprises a portion of the
21 document stored in the memory of the computer, all without saving said data to any permanent file
22 prior to communicating the data into the document stored within the memory of the computer.

23 2. (Original) The method of claim 1, further comprising the steps of:

24 (a) creating a list of all image source devices in communication with the
25 computer; and

26 (b) enabling a user to select the image source device that is active from the list.

27 3. (Original) The method of claim 1, wherein the active image source device comprises one
28 of a scanner and a digital camera.

29 4. (Original) The method of claim 1, wherein the step of acquiring the image comprises the
30 step of scanning a graphic source that has defined edges, further comprising the steps of

1 automatically detecting the edges of the graphic source, and cropping the image at the edges of the
2 graphic source to exclude any portion of a scanned field beyond the edges of the graphic source from
3 the image represented by the data inserted into the document.

4 5. (Original) The method of claim 1, further comprising the step of converting the data
5 representing the image into a compressed format prior to inserting the data into the document.

6 6. (Previously Presented) The method of claim 1, further including the steps of:

7 (a) selecting at least one image enhancement criterion from within the application
8 program; and

9 (b) enhancing said captured image based on said image enhancement criterion,
10 prior to inserting said data representing the image into said document.

11 7. (Original) The method of claim 6, wherein the image enhancement criterion is a contrast
12 level of the image that is adjusted to enhance a brightness of the image within the document.

13 8. (Original) The method of claim 6, wherein the image enhancement criterion is a color
14 level of the image that is adjusted to enhance a color relationship of the image inserted within the
15 document, based on a gamma correction algorithm.

16 9. (Previously Cancelled)

17 10. (Previously Presented) The method of claim 1, further comprising the step of
18 determining a set of capabilities of the image source device that is active, wherein the set of image
19 capture parameters are negotiated based in part on the capabilities of said image source device.

20 11. (Original) The method of claim 10, wherein a set of capabilities are associated with the
21 image source devices connected with the computer and are stored in an operating system registry.

22 12. (Previously Presented) The method of claim 1, further comprising the step of using the
23 special API module for determining from within the application program whether the image source
24 device that is active is able to perform an automatic image scan, wherein the automatic image scan
25 comprises the steps of capturing an image of a graphic source with said image source device and
26 inserting the data representing the image into the document, all without requiring a user to select
27 image capture parameters.

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1 13. (Original) The method of claim 12, wherein the image source device that is active has an
2 X resolution and a Y resolution and includes a driver that provides a user interface for selecting
3 image capture parameters, the step of determining if said image source device can perform the
4 automatic image scan comprises the steps of:

5 (a) confirming that said image source device can control its X resolution;
6 (b) confirming that said image source device can control its Y resolution; and
7 (c) confirming that the user interface of said image source device can be bypassed,
8 wherein an affirmative answer to all of the steps of confirming indicates that said image source
9 device can perform the automatic image scan.

10 14. (Original) The method of claim 12, wherein the step of determining if said image source
11 device can perform the automatic image scan comprises the steps of:

12 (a) setting an error flag;
13 (b) attempting to perform an automatic image scan;
14 (c) clearing the error flag if the automatic image scan is successful; and
15 (d) evaluating the error flag during a subsequent use of the image source device,
16 whereby if the error flag has not been cleared, the image source device cannot perform an automatic
17 image scan.

18 15. (Original) The method of claim 12, wherein if it is determined that said image source
19 device can perform an automatic image scan, enabling a user of the application program to
20 selectively cause the image to be acquired and the data representing the image to be inserted into the
21 document, all with a single user control selection.

22 16. (Original) A computer-readable medium having computer-executable instructions for
23 performing the steps recited in claim 1.

24 17. (Original) A computer-readable medium having computer-executable instructions for
25 performing the steps recited in claim 12.

26 18. (Previously Presented) A method for inserting a plurality of images into a document
27 stored in a memory of a computer, comprising the steps of:

28 (a) enabling an image source device user interface provided by a special
29 application programming interface module from within an application program used to create a text
30 content of the document, wherein the application program is running on the computer that is in

1 communication with an image source device, said image source device acquiring multiple images and
2 storing image source data representing the multiple images, wherein the special API module interacts
3 with a TWAIN module to control the image source device, and wherein the image source device user
4 interface provides a selection scheme that is independent of the TWAIN module within the
5 application program for selecting a plurality of the images stored in the image source device for
6 insertion into the document;

7 (b) enabling a user to use the selection scheme of the image source device user
8 interface from within the application program to select the plurality of images to be inserted into the
9 document;

10 (c) transferring data representing the images selected from the image source
11 device, to the memory of the computer;

12 (d) converting said data representing the selected image into a compressed format;
13 and

14 (e) inserting said image data in the compressed format into the document stored in
15 the memory of a computer so that the document includes the plurality of images without saving said
16 image data in the compressed format to any permanent file prior to inserting the image data in the
17 compressed format into the document stored in the memory of the computer.

18 19. (Original) The method of claim 18, wherein the application program is a word
19 processing application, and the plurality of images are inserted into the document as a plurality of
20 tiled images.

21 20. (Original) The method of claim 18, wherein the application program is a spreadsheet
22 application that produces a spreadsheet document, and the plurality of inserted images are inserted
23 into the spreadsheet document as a plurality of cascaded images.

24 21. (Original) The method of claim 18, wherein the application program is a presentation
25 design application, and the plurality of inserted images are inserted into a presentation document as a
26 plurality of individual slides.

27 22. (Previously Presented) The method of claim 18, further including the step of performing
28 a postprocessing modification to said data from within the application program to enhance a quality
29 of the plurality of images.

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1 23. (Original) A computer-readable medium having computer-executable instructions for
2 performing the steps recited in claim 18.

3 24. (Previously Presented) A system for inserting an image into a document, comprising:

- 4 (a) a computer having a memory and a processor, the memory storing:
5 (i) machine instructions that are executable on the processor; and
6 (ii) the document;
7 (b) an application program comprising the machine instructions that are stored in
8 the memory, a text content of said document being editable using the application program;
9 (c) an image acquisition device connected in communication with the computer, to
10 provide image data representing an image to the computer;
11 (d) a source driver module comprising computer-executable instructions stored in
12 the memory and in communication with the image acquisition device so as to control acquisition of
13 an image by the image acquisition device for transfer as the image data, into the memory of the
14 computer;
15 (e) a source manager module comprising computer-executable instructions stored
16 in the memory and in communication with the source driver module, the source manager module
17 providing commands to the source driver module to acquire an image using the image acquisition
18 device, such that the application program negotiates with the image acquisition device that is active
19 to determine a set of image capture parameters that control said image source device when acquiring
20 the image; and
21 (f) an interface module comprising a special application programming interface
22 (API) module defined by computer-executable instructions stored in the memory, the special API
23 module serving as an interface with the source manager module and under control of the application
24 program, isolating a user from the source manager module and thereby simplifying acquisition of
25 images for insertion into the document, the interface module providing commands to the source
26 manager module to acquire an image using the image acquisition device, the interface module
27 inserting the image data representing the image into the document that is stored in the memory of a
28 computer without saving said image data to any permanent file prior to inserting the image data into
29 the document stored in the memory of the computer.

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1 25. (Original) The system of claim 24, wherein the application program is a word processing
2 application.

3 26. (Original) The system of claim 24, wherein the application program is a spreadsheet
4 application.

5 27. (Original) The system of claim 24, wherein the application program is a presentation
6 design application.

7 28. (Original) The system of claim 24, wherein the source manager module complies with
8 the TWAIN communication specification.

9 29. (Original) The system of claim 24, wherein the application program is able to request the
10 interface module to acquire an image by issuing a single procedure call to the interface module.

11 30. (Original) The system of claim 24, wherein the application program provides a user
12 interface that enables a user to acquire an image from the image acquisition device and insert the data
13 representing the image into the application program document by selecting a single application menu
14 option and performing a single subsequent user action.

15 31. (Previously Presented) The system of claim 24, wherein the interface module comprises
16 additional computer-executable instructions for enhancing the quality of the captured image from
17 within the application program, the captured image quality being enhanced prior to inserting the data
18 representing the image into the application program document.

19 32. (Original) The system of claim 24, wherein the image is acquired by scanning a graphic
20 source that has edges, and the interface module comprises additional computer-executable
21 instructions for detecting the edges of the graphic source so as to automatically crop a scanned field
22 to include only the portion of the scanned field included within the graphic source in the image, the
23 image being so cropped prior to the data representing the image being inserted into the document.

24 33. (Original) The system of claim 24, wherein the interface module comprises additional
25 computer-executable instructions for converting the data representing the image into a compressed
26 format, said data being converted into the compressed format prior to being inserted into the
27 document.